

NANOPARTICLE-FILLED STEREOLITHOGRAPHIC**ABSTRACT OF THE DISCLOSURE**

A process for forming a three-dimensional article by stereolithography, said process comprising the steps:

- 1) coating a thin layer of a liquid radiation-curable composition onto a surface said composition including at least one filler comprising silica-type nano-particles suspended in the radiation-curable composition;
- 2) exposing said thin layer imagewise to actinic radiation to form an imaged cross-section, wherein the radiation is of sufficient intensity to cause substantial curing of the thin layer in the exposed areas;
- 3) coating a thin layer of the composition onto the previously exposed imaged cross-section;
- 4) exposing said thin layer from step (3) imagewise to actinic radiation to form an additional imaged cross-section, wherein the radiation is of sufficient intensity to cause substantial curing of the thin layer in the exposed areas and to cause adhesion to the previously exposed imaged cross-section;
- 5) repeating steps (3) and (4) a sufficient number of times in order to build up the three-dimensional article.